

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A pulse oximeter for measuring arterial oxygen saturation levels, the pulse oximeter comprising:

an LED signal generator for transmitting one or more light signals to a testing medium;

a photodetector signal generator for obtaining at least a portion of the light signal generated by the LED signal generator and for generating a photocurrent corresponding to the detected signals;

an integrated information transmission component for storing information corresponding to the pulse oximeter and for transmitting the information; and

an oximeter processing system for causing the LED signal generator to generate a signal, for processing the photocurrent from the photodetector signal generator and for providing a voltage source to cause the information transmission component to transmit the stored information corresponding to the pulse oximeter;

wherein the voltage source provided by the oximeter processing system to read the information transmission component can be higher than a turn on voltage for the LED signal generator without causing the LED signal generator to generate a signal.

2. The pulse oximeter as recited in Claim 1, wherein the integrated information transmission component includes an identification chip for storing the information corresponding to the pulse oximeter.

3. The pulse oximeter as recited in Claim 1, wherein the integrated information transmission component includes a passive circuit component for storing the information corresponding to the pulse oximeter.

4. The pulse oximeter as recited in Claim 1, wherein information corresponding to the pulse oximeter includes information corresponding to characteristics of one or more components of the pulse oximeter.

5. The pulse oximeter as recited in Claim 1, wherein the information corresponding to the pulse oximeter includes information corresponding to the operation of the pulse oximeter.

6. The pulse oximeter as recited in Claim 1, wherein the information corresponding to the pulse oximeter is selected from a group consisting of a precise wavelength of a LED, a date of manufacture for a component, an identification of a manufacturer, authentication codes for a component, a serial number for a component, software programs, software updates, a patient identification number, and a clinic identification number.

7. The pulse oximeter as recited in Claim 1, wherein the integrated information transmission component is configured to not require additional wiring to be integrated in the pulse oximeter.

8. A pulse oximeter for measuring arterial oxygen saturation levels, the pulse oximeter saturation, the pulse oximeter comprising:

means for transmitting one or more light signals to a testing medium;

means for obtaining at least a portion of the light signal generated by the LED signal generator and for generating a photocurrent corresponding to the detected signals;

means for storing information corresponding to the pulse oximeter; and

means for providing a voltage source to cause the information transmission component to transmit the stored information corresponding to the pulse oximeter, wherein the voltage source to read the information transmission component can be higher than a turn on voltage for the means for transmitting one or more light signals to a testing medium

9. The pulse oximeter as recited in Claim 8, wherein the means for storing information corresponding to the pulse oximeter includes an identification chip for storing the information corresponding to the pulse oximeter.

10. The pulse oximeter as recited in Claim 8, wherein the means for storing information corresponding to the pulse oximeter includes a passive circuit component for storing the information corresponding to the pulse oximeter.

11. The pulse oximeter as recited in Claim 8, wherein information corresponding to the pulse oximeter includes information corresponding to characteristics of one or more components of the pulse oximeter.

12. The pulse oximeter as recited in Claim 8, wherein the information corresponding to the pulse oximeter includes information corresponding to the operation of the pulse oximeter.

13. The pulse oximeter as recited in Claim 8, wherein the information corresponding to the pulse oximeter is selected from a group consisting of a precise wavelength of a LED, a date of manufacture for a component, an identification of a manufacturer, authentication codes for a component, a serial number for a component, software programs, software updates, a patient identification number, and a clinic identification number.

14. The pulse oximeter as recited in Claim 8, wherein the means for storing information corresponding to the pulse oximeter is configured to not require additional wiring to be integrated in the pulse oximeter.

15. A pulse oximeter for measuring arterial oxygen saturation levels, the pulse oximeter comprising:

- a signal generator for transmitting one or more signals to a testing medium;

- a photodetector signal generator for processing at least a portion of the signal generated by the signal generator;

- an integrated information transmission component for storing information corresponding to the pulse oximeter and for transmitting the information, wherein the integrated information transmission component is configured to not require additional wiring to be integrated in the pulse oximeter; and

- an oximeter processing system in communication with the signal generator, the photodetector signal generator and the integrated information transmission component, wherein the oximeter processing system provides voltage to cause the information transmission component to transmit the stored information corresponding to the pulse oximeter, wherein the voltage source can be higher than a turn on voltage for the signal generator without causing the signal generator to generate a signal.

16. The pulse oximeter as recited in Claim 15, wherein the integrated information transmission component includes an identification chip for storing the information corresponding to the pulse oximeter.

17. The pulse oximeter as recited in Claim 15, wherein the integrated information transmission component includes a passive circuit component for storing the information corresponding to the pulse oximeter.

18. The pulse oximeter as recited in Claim 15, wherein information corresponding to the pulse oximeter includes information corresponding to characteristics of one or more components of the pulse oximeter.

19. The pulse oximeter as recited in Claim 15, wherein the information corresponding to the pulse oximeter includes information corresponding to the operation of the pulse oximeter.